



Trunked Digital Smart Grid

PATENT PENDING



Field Force Communications

Payment and Prepaid Billing

Demand Load Management

Substation Control

i2way Corporation has developed a unique portfolio of secure, integrated and low cost utility solutions: The Trunked Digital Smart Grid. The i2way TDSG network integrates wireless control and monitoring of consumer electric consumption, communications to and from electric substations, plus wireless broadband to the utility's field force. All using a single integrated wireless network, owned and operated by the utility.

The system is being installed at several rural electric utilities in the American Southwest, each of which has become equity investors in i2way Corporation. The TDSG technology uniquely solves the vast distances to customers utilities in rural areas face, yet pioneers features and capabilities other suppliers can't offer, and offers disruptive technology increasing utilities competitiveness and reducing energy consumption.



To provide utilities with mission critical, utility-grade, wide area service, i2way employs land mobile frequencies available worldwide. Frequencies under 500 MHz provide long range, secure service direct to utility meters.

The field-proven TDSG base station transceiver provides 10,800 bits per second IP compatible trunked data on as many as 32 radio channels, providing broadband equivalency over non line-of-sight long distances. At the customer premises, the TDSG Smart Meter/Communications Hub provides Smart Meter functions, combined with 200 amp service disconnect and Bluetooth LE Home Area Network broadband at 400 kbps. The TDSG Energy Manager/Thermostat with

Android AM-OLED touch screen communicates wirelessly with its companion Meter and home appliances. It directly controls HVAC systems, allowing demand control of loads at critical, unexpected peaks, providing all of the functions of a standard electronic thermostat, plus real time Grid Status display, Time of Day Billing, Demand Load Management (by thermostat control), invoice display and bill payment by credit card of bank debit, Prepaid Billing, selection of alternative sources of energy, weather alerts, and electric car charging management. It connects easily in place of conventional HVAC thermostats, with no wiring to the remote meter, and becomes the customer's visible "front end" to the utility's grid. All functions may be remotely controlled via a web portal or smart phone "app".

